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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/699,922	10/30/2000	Brig Barnum Elliott	00-4026	8244

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EXAMINER	
MICHALSKI, JUSTIN I	

ART UNIT	PAPER NUMBER
2644	

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/699,922	ELLIOTT, BRIG BARNUM	
	Examiner	Art Unit	
	Justin Michalski	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 November 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20 and 24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *17-20* is/are allowed.

6)☒ Claim(s) *1,3-9,11-16 and 24* is/are rejected.

7)☒ Claim(s) *2 and 10* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 4, 7-9, 11, 12, 14-16, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Op De Beek et al. ("Op De Beek") (US Patent 4,628,530).

Regarding Claim 1, Op De Beek discloses a method for adjusting an audio level of an audio device (Fig. 1, references 3, 4, 5, 6, and 25), comprising: receiving a first audio signal from the audio device (microphone 14); receiving a data packet from the audio device (signal 15), the data packet comprising a second audio signal that is sampled at the audio device (A/D converter 25); determining whether a difference between the first audio signal and the second audio signal exceeds a threshold value (Col. 4, lines 57-62); and adjusting the audio level of the audio device when the difference between the first audio signal and the second audio signal exceeds the threshold value (control signal 10 and equalizing unit 4).

Regarding Claim 3, Op De Beek further discloses determining whether the audio level is to be increased or decreased (frequency analyzing unit 17).

Regarding Claim 4, Op De Beek further discloses generating a data packet comprising a volume adjustment command (signal 10), the volume adjustment command including a flag indicating that the audio level is to be increased or decreased

(it is inherent that control signal 10 will include a control signal, i.e. flag), transmitting the data packet containing the volume adjustment command to the audio device (4), and adjusting the audio level based on the flag.

Regarding Claim 7, Op De Beek further discloses determining, based on the determining whether a difference between the first audio signal and the second audio signal exceeds the threshold value, an amount to adjust the audio level of the audio device (Col. 4, lines 57-62), and wherein the adjusting includes: adjusting the audio level based on the amount (control signal 10).

Regarding Claim 8, Op De Beek discloses a system for adjusting an audio level of and audio device (Fig. 1, references 3, 4, 5, 6, and 25), comprising: means for receiving at least one first audio signal from the audio device (microphone 14); means for receiving a data packet from the audio device (signals 15), the data packet comprising at least one second audio signal the at is sampled at the audio device (D/A converter 25); means for determining whether a difference between the at least one first audio signal and the at least one second audio signal exceeds a threshold value (Col. 4, lines 57-62); and means for adjusting the audio level of the audio device when the difference between the at least first audio signal and the at least second audio signal exceeds the threshold value (control signal 10 and equalizing unit 4).

Regarding Claim 9, Op De Beek discloses a system for adjusting audio levels (Fig. 1), comprising: a sensor (16) configured to: receive a first audio signal (17), receive at least one data packet comprising a second audio signal (15) that is sampled at an audio device (3, 4, 5, 6, and 25), determine whether a difference between an

average volume level of the first audio signal and the second audio signal exceeds a threshold value (Col. 12, lines 35-56), generate a response data packet when the difference between the average volume level of the first audio signal and the second audio signal exceeds the threshold value (10), the response data packet including a volume adjustment command, and transmit the response data packet; and the audio device configured to: transmit the first audio signal (signal to microphone 14), transmit the at least one data packet to the sensor (signal 15), receive the response data packet (signal 10), and adjust an audio level based on the response data packet (unit 4).

Regarding Claim 11, Op De Beek further discloses the sensor is further configured to: determine whether the audio level of the audio device is to be increase or decreased (paragraph bridging columns 12 and 13).

Regarding Claim 12, Op De Beek further discloses the response data packet further includes a flag (i.e. control signal 10) indicating that the audio level of the audio device is to be increased or decreased, and wherein the audio device is configured to adjust the audio level based on the flag.

Regarding Claim 14, Op De Beek further discloses determining an amount of audio level adjustment (unit 16), and storing the amount in the response data packet (control signal 10).

Regarding Claim 15, Op De Beek discloses a computer-readable medium (Op De Beek discloses a digital system which will inherently contain a computer readable medium containing instructions) containing instructions for controlling at least one processor (analyzing unit 16) to perform a method for determining whether to adjust a

volume of a remote audio device (3, 4, 5, 6, and 25), the method comprising: receiving at least one first audio signal (17); receiving a data packet comprising at least one second audio signal that is sampled at the audio device (15); determining a difference between the at least one first audio signal and the at least one second audio signal; comparing the difference to a threshold value Col. 4, lines 57-62); generating a volume adjustment command when the difference exceeds the threshold value; and transmitting the volume adjustment command to the remote audio device (control signal 10).

Regarding Claim 16, Op De Beek further discloses a computer-readable medium containing instructions for controlling at least one processor to perform a method for adjusting a volume level, the method comprising: transmitting at least one first audio signal; generating a data packet, the data packet comprising at least one second audio signal that is sampled at a source of the second audio signal; transmitting the data packet to a remote device; receiving a volume adjustment command from the remote device, the volume adjustment command comprising a flag indicating that the volume level is to be increase or decreased; and adjusting the volume level in response to the flag.

Regarding Claim 24, Op De Beek discloses a method for adjusting an audio level of an audio device, comprising: receiving a first audio signal, the first audio signal comprising a plurality of sub-bands; receiving a data packet, the data packet comprising a second audio signal comprising a plurality of sub-bands that are sampled at the audio device; determining, for each sub-band, whether a difference between a sub-band of the first audio signal and a corresponding sub-band of the second audio signal exceeds

a threshold value; and adjusting the audio level of a sub-band at the audio device when the difference between a sub-band of the first audio source and the corresponding sub-band of the second audio signal exceeds the threshold value.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Op De Beek as applied to claim 1 above, and further in view of Konstantinou et al. (US Patent 6,584,201). Op De Beek discloses a method as stated apropos of claim 1. Op De Beek does not disclose a reactivity setting value, and wherein the adjusting occurs when a time period since a previous audio level adjustment equals or exceeds the reactivity setting value. Konstantinou et al. discloses a remote automatic volume control apparatus which polls for changes in sound every second to prevent continual fluctuations in emitted sound level (i.e. adjusts after one second (reactivity time) has passed since last adjustment) (Column 5, line 63 through Column 6, line 1). Therefore, it would have been obvious to one or ordinary skill in the art at the time the invention was made to combine the reactivity time with the method disclosed by Op De Beek to prevent continual fluctuations in the emitted sound as taught by Konstantinou et al.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Op De Beek as applied to claim 1 above in view of Hadley et al. (US Patent 6,061,455). As stated above apropos of claim 1 Op De Beek makes obvious all elements of that claim. Op De Beek does not disclose the threshold value set by a user. Hadley et al. discloses an audio system where a low and high threshold level is selected by the user (Column

2, lines 45-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the user defined threshold with the method disclosed by Op De Beek in order to create a user selected sound level output for a more customizable audio output.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Op De Beek as applied to claim 9 above, and further in view of Konstantinou et al. (US Patent 6,584,201). As stated above apropos of claim 9, Op De Beek makes obvious all elements of that claim. Op De Beek does not disclose use of a reactivity value. Konstantinou et al. discloses a volume control system which polls for changes in sound every second to prevent continual fluctuations in emitted sound level (i.e. adjusts after one second (reactivity time) has passed since last adjustment) (Column 5, line 63 through column 6, line 1). Therefore, it would have been obvious to one or ordinary skill in the art at the time the invention was made to combine the reactivity time with the information sent by the data packet as disclosed in the method by Op De Beek to prevent continual fluctuations in the emitted sound.

Allowable Subject Matter

1. Claims 17-20 allowed.

2. Claims 2 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (571)272-7524. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571)272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SINH TRAN
SUPERVISORY PATENT EXAMINER

JIM